

June 21, 2017



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 10684
(THIRTEENTH REVISION)

EXPIRATION DATE: 2021-05-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Chart, Inc.
New Prague, Minnesota
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the manufacture, mark, sale and use of non-DOT specification insulated portable tanks to be used for the transportation in commerce of nitrogen, refrigerated liquid (Division 2.2). This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.318, § 173.320, § 176.30, and § 176.76(g), in that a non-DOT specification portable tank is not authorized, except as specified herein.

June 21, 2017

5. BASIS: This special permit is based on the application of Chart Inc. dated May 10, 2017, submitted in accordance with § 107.109.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper shipping name	Hazard Class/ Division	Identification Number	Packing Group
Nitrogen, refrigerated liquid (cryogenic liquid)	2.2	UN1977	N/A

7. SAFETY CONTROL MEASURES:

- a. Prescribed packaging is a non-DOT specification portable tank designed and constructed in accordance with Section VIII of the ASME Code and subparagraphs a. or b. of this paragraph. The portable tank is skid-mounted or enclosed in a carbon steel protective frame. The portable tank is vacuum-insulated. For the inner tank, design pressure is 120 PSIG, design temperature is -320 °F, and water capacity is 1000 US gallons nominal. Materials of construction are SA 240 Type 304 stainless steel for the inner tank, and SA 36, ASTM A 283 or equivalent carbon steel for the outer jacket and protective frame.
- b. Each portable tank must conform to Minnesota Valley Engineering Inc.'s drawings B-39499 Rev.0, D-38975 Rev.0, D-38976 Rev.0, D-38977 Rev.0, D-39146, Rev.0, other related drawings all dated August 29, 1991; and calculations on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD).
- c. The packaging authorized are Minnesota Valley Engineering Inc.'s Model HL-1000SP-120-WELLNITE cryogenic portable tanks with Serial Nos. 109, 110, 111, 112, and 113 for which ASME U-1A forms are on file with OHMSAPD.

June 21, 2017

d. Tanks other than those specified in Paragraph 7.b. of this special permit are not authorized unless corresponding drawings, calculations and ASME U1-A forms are submitted and on file with OHMSAPD prior to first shipment.

e. The packagings must conform with § 178.338 except as follows:

(1) Impact testing is not required on the stainless steel or nickel steel inner tank material.

(2) § 178.338-10 does not apply.

(3) The portable tank need not conform to § 178.338-(13)(a) or (b). Lifting lugs, framework and any anchoring to the inner tank or the tank jacket must conform with § 178.338-13(a).

(4) A portable tank that meets the definition of "container" must meet the requirements of 49 CFR parts 450 thru 453, and each design must be qualified in accordance with § 178.270-13(c).

(5) "DOT-SP 10684" must replace the mark "MC 338".

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this special permit and the HMR.

c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

June 21, 2017

d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Safety Approvals and Permits Division for a specific manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. Each portable tank must be reinspected and retested at a pressure of 14.7 plus one and one-fourth times the sum of the design pressure plus the static head, once every 5 years in accordance with § 180.605(c) as prescribed for DOT 51 specification portable tanks. In place of the requirement for visual inspection per § 180.605(d), before and after vacuum readings must be used to determine leakage. Nitrogen may be used as a test medium in place of (air or hydrostatic) as required by § 180.605(h).

g. Each portable tank must be plainly marked on both sides near the middle, in letters and numerals at least two (2) inches high on a contrasting background, "DOT-SP 10684".

h. Each portable tank must be prepared and shipped as required in § 173.318, as applicable for the lading.

i. No person may transport a charged portable tank unless the pressure of the lading is equal to or less than that used to determine the marked rated holding time and the OWT equal to or greater than the elapsed time between the start and the termination of travel.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.

10. MODAL REQUIREMENTS:

a. A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.

b. Shipments by cargo vessel must conform with the following:

(1) The package must conform with § 176.76(g). The portable tank must not be overstowed with other containers or freight.

(2) Any lading road relief valve set at a pressure lower than that prescribed for the (safety) pressure relief valve must be closed during transportation by cargo vessel.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, Parts 171-180.
- o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by § 172.700 through § 172.704.

No person may use or apply this special permit, including display of its number, when the special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term

June 21, 2017

"exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: PTO/TG